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SUBJECT: Application of 30 CFR Part 75.323(e) to Bleeder Systems

## Scope

This Program Policy Letter (PPL) affects underground coal mine operators, miners and Coal Mine Safety and Health (CMS&H) personnel.

# **Purpose**

The purpose of this policy letter is to provide clarification for underground coal mine operators, miners and Coal Mine Safety and Health (CMS&H) personnel of the Mine Safety and Health Administration's (MSHA) application of 30 CFR Part 75.323(e). This letter describes MSHA's policy for determining the location of the 2.0 percent methane limit in a bleeder split of air.

# **Policy**

A bleeder system includes the area from which pillars are wholly or partially extracted (including the internal airflow paths), bleeder entries, bleeder connections, and all associated ventilation control devices that control the air passing through the pillared area. Bleeder entries are special air courses designed and maintained as part of the mine ventilation system. Air from separate bleeder systems are separate splits of air.

Title 30 CFR Part 75.323(e) "Bleeders and other return air courses." states that, "The concentration of methane in a bleeder split of air immediately before the air in the split joins another split of air, . . . , shall not exceed 2.0 percent." The required 2.0 percent

methane concentration limit in the bleeder airflow immediately before the bleeder split joins another split of air provides for a specified measure of dilution of the methane within the bleeder system. This 2.0 percent methane limit impacts the dilution of methane throughout the bleeder system. The air course downstream of the location where the bleeder split joins another split of air is a return air course.

Air that passes through a ventilation control that is intended to be reasonably air tight and that separates adjacent air courses is leakage. Leakage from another split that enters directly into the pillared area does not impact the location of the Section 75.323(e) 2.0 percent methane limit, but may impact the effectiveness and/or evaluation of the bleeder system. Leakage from another split that enters the bleeder split can decrease the dilution capacity of the bleeder system and impact the specified measure of dilution of methane quantified by Section 75.323(e). When evaluating the significance of the impact of leakage air on the methane concentration at the location specified in Section 75.323(e), the effect of the total leakage air must be considered. Factors to consider include the effect the leakage air from another split entering the bleeder split has on the air quantity and air quality within the bleeder split it enters. If the cumulative amount of leakage air that enters the bleeder split from another split(s) exceeds 15 percent of the air quantity in the affected portion of the bleeder split, a determination will be made as to whether the leakage is significant. MSHA's experience has been that leakage from another split in excess of 15 percent may have significant impact. This leakage may have an effect on the methane concentration in the bleeder split that is equivalent to another split of air joining the bleeder split at or before the location specified in Section 75.323(e). If this leakage is determined to be significant, the district manager may require, as specified in Section 75.371(z), methane limits at additional locations within the bleeder system be included in the ventilation plan in order to evaluate and to assure the effectiveness of the bleeder system.

A small split of intake air used to ventilate electrical installations that is directed into the bleeder split, that MSHA has determined to be insignificant, would not affect the location of the 2.0 percent methane limit prescribed in Section 75.323(e). Considerations relative to the significance of the small splits of intake air used to ventilate electrical installations that are directed into the bleeder split should be similar to those related to the impact of leakage air on the air quantity and air quality of the bleeder split. In addition, these small splits should also be considered significant if they adversely impact the performance of the bleeder system, decreasing the ventilation of the pillared area by reducing the available ventilating pressure or airflow quantity. Multiple small splits of air that are used to ventilate electrical installations may have a cumulative impact on the bleeder system that is significant. This cumulative impact should be considered when determining the significance of each individual small split of air used to ventilate electrical installations that is directed into the bleeder split.

A small split of intake air used to ventilate a longwall set-up face that is directed into the bleeder split, that MSHA has determined to be insignificant, would not affect the location of the 2.0 percent methane limit prescribed in Section 75.323(e). Considerations relative to the significance of the intake splits used to ventilate a longwall set-up face that are directed into the bleeder split should be similar to those related to the impact of leakage air on the air quantity and air quality of the bleeder split. These splits should also be considered significant if they adversely impact the performance of the bleeder system, decreasing the ventilation of the pillared area by reducing the available ventilating pressure or airflow quantity. When evaluating the significance of longwall set-up face splits relative to the location of the 2.0 percent methane limit prescribed in Section 75.323(e), factors to consider include the effect air from the longwall set-up split that enters the bleeder split has on the air quantity and air quality within the portion of the bleeder split it enters. Approved ventilation plans sometimes set limits restricting the quantity of air that is permitted to ventilate a longwall set-up face such that it does not affect the location of the 2.0 percent methane limit prescribed in Section 75.323(e).

The location in the bleeder split where the concentration of methane shall not exceed 2.0 percent is immediately before the air in the split joins another split of air. When air from the bleeder split is directed to the surface, the bleeder split ends at the surface. The location, in air from a bleeder split that is directed to the surface, where the methane concentration is to be measured for compliance with the Section 75.323(e) 2.0 percent methane limit is in the bleeder split immediately before the air in the bleeder split reaches the surface. When air from the bleeder split is directed to the surface through a vertical shaft, factors influencing air quality within the shaft should be considered in determining whether the bottom of the shaft provides an equivalent measurement location. When air from the bleeder split exits through an exhaust fan, consideration should be given to the significance of air from the surface entering the fan housing in determining whether the exhaust of the fan provides an equivalent measurement location.

Nothing in this Program Policy Letter abrogates, alters, or diminishes mine operators' responsibility under Section 303(z)(2) of the Mine Act and 30 CFR 75.334(b)(1) to ensure that bleeder systems are effective and maintained so as to continuously dilute, render harmless, and carry away methane and other explosive gases within areas that have been wholly extracted, partially extracted, or abandoned, such that the active workings of the mine are protected from the hazards of methane and other explosive gases. Section 75.334(b)(1) specifically requires that bleeder systems continuously dilute and move methane-air mixtures and other gases, dusts, and fumes from the worked-out area away from active workings and into a return air course or to the surface of the mine. A determination that the quantity of leakage air entering a specific bleeder split does not exceed 15 percent, or the fact that there has not been a determination to include an additional MPL in the ventilation plan, does not mean that the bleeder system is in compliance with Section 303(z)(2) of the Mine Act or 30 CFR 75.334(b)(1).

### **Background**

The application of Section 75.323(e) has been addressed differently from District to District and has resulted in inconsistencies throughout the industry. This policy letter is intended to assure uniform and consistent understanding of the standard.

### **Authority**

30 CFR Section 75.323(e).

### **Filing Instructions**

This program policy letter should be filed behind the tab marked "Program Policy Letters" at the back of Volume V of the Coal Program Policy Manual.

## **Issuing Office and Contact Person**

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### **Internet Availability**

This policy letter may be viewed on the Internet by accessing MSHA's home page at <a href="http://www.msha.gov">http://www.msha.gov</a> and choosing "Compliance Info" and "Program Policy Letters."

#### Distribution

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